

Applicants hereby submit that the enclosures fulfill the requirements under 37 C.F.R. §1.821-1.825. The amendments in the specification merely insert the paper copy of the Sequence Listing and sequence identifiers in the specification. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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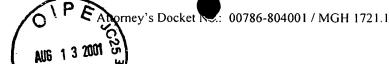
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CANCELLED "Version With Markings to Show Changes Made"

In the specification:

Paragraph beginning at page 6, line 22, has been amended as follows:

Figure 5 depicts an alignment of the A domains of nine alpha integrin α subunit (CD11b (SEQ ID NO:1), CD11c (SEQ ID NO:2), CD11d (SEQ ID NO:3), CD11a (SEQ ID NO:4), alpha 1 (SEO ID NO:5), alpha 2 (SEO ID NO:6), alpha 10 (SEO ID NO:7), alpha 11 (SEO ID NO:8), and alpha E (SEQ ID NO:9)). In this alignment, the invariant Ile (I316) is indicated by an arrow.

Paragraph beginning at page 6, line 28, has been amended as follows:

Figure 7 is an alignment of the A-like domains of eight integrin β subunits (b3 (SEQ ID NO:10), b5 (SEQ ID NO:11), b6 (SEQ ID NO:12), b1 (SEQ ID NO:13), b2 (SEQ ID NO:14), b7 (SEQ ID NO:15), b8 (SEQ ID NO:16), and b4 (SEQ ID NO:17)). In this alignment, the residue corresponding to the invariant IIe in β subunits is indicated by an arrow.

Paragraph beginning at page 7, line 13, has been amended as follows:

The variant polypeptides were created using standard recombinant techniques. Restriction and modification enzymes were purchased from New England Biolabs, Inc. (Beverly, MA), Boehringer Mannheim (Germany), or GIBCO BRL (Gaithersburd, MD). Site-directed mutagenesis was carried out in pGEX-4T-1 vector as described (Rieu et al. 1996 J Biol Chem 271:15858). The following mutagenic primers were used. IFAdel Fwd: 5'-TATAGGATCCGAGGCCCTCCGAGGGAGTCCTCAAGAGGATAG-3' (SEQ ID NO:18); Reverse: 5'-CTACTCGAGTTACTTCTCCCGAAGCTGGTTCTGAATGGTC-3' (SEQ ID NO:19); I-G reverse: 5'- CTACTCGAGTTAACCCTCGATCGCAAAGCCCTTCTC-3' (SEO ID NO:20). Introduction of the respective mutation was confirmed by direct DNA sequencing. The PvuI-BspEI-restricted cDNA fragment of the A-domain containing the mutation was subcloned into the PvuI-BspEI-restricted CD11b cDNA, cloned into pcDNA3 plasmid, which containing full-length human CD11b (Rieu et al. 1996 J Biol Chem 271:15858). 11b A¹²³⁻³²¹ and Attorney's Docket No.: 00786-804001 / MGH 1721.1

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11bA¹²³⁻³¹⁵ and 11bA^{1→G} A-domains were expressed as GST fusion proteins in *Escherichia coli* (Michishita et al. 1993 Cell 72:857), cleaved with thrombin and purified as described Li et al. 1999 *J. Cell Biol* 143:1523. C¹²⁹ was replaced by S in all the expressed GST-A-domain fusion form to prevent formation of disulfide-linked dimmers in solution after thrombin cleavage (not shown). Purity was confirmed by SDS-PAGE analysis.